

Date: Fri, 26 Feb 93 10:00:26 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #260
To: Info-Hams

Info-Hams Digest Fri, 26 Feb 93 Volume 93 : Issue 260

Today's Topics:

 1 Watt = ? dBm ?
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 Bikers Ham It up
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 New Kenwood HF Radio TS-50 (2 msgs)
 PL-259 connectors
 Snake Island - Which DXCC Country? (2 msgs)
 Soldering PL259's
 WWV time

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 26 Feb 93 15:09:10 GMT
From: news-mail-gateway@ucsd.edu
Subject: 1 Watt = ? dBm ?
To: info-hams@ucsd.edu

In any system, 50 ohms, 600 or whatever:

0 dBm = 1 milliwatt

10 dBm = 10 milliwatt
13 dBm = 20 milliwatt
20 dBm = 100 milliwatt
30 dBm = 1 watt

etc.

To find the voltage across a load, e.g. 50 ohms at a specific impedance use the relationship:

$P = E^2 / R$

Seth KC2WE or taylor_s@corp.timeplex.com

Date: 26 Feb 1993 11:18 EST
From: usc!howland.reston.ans.net!agate!eos!data.nas.nasa.gov!eagle!
lims01.lerc.nasa.gov!lwwald@network.UCSD.EDU
Subject: Amplifier Tuning
To: info-hams@ucsd.edu

Once again I will pose a question to all the knowledgeable netters out there!! (Incidentally, thanks to all who responded on my last amplifier question). The current question deals with PI network tuning on my SB-200;

on 80 and 40 I can't get the "Load" capacitor to peak the power output. It loads such that I have the setting at one end of the capacitors travel. I have talked to another friend of mine who had the same trouble with his SB-200. On 80 and 40 I am getting about 550-575 watts out with 100 watts in, which is low for this amp. The tubes are new, BTW. Any suggestions??

BTW, please respond only if you have any brain cells regarding amplifiers, as we all know this newsgroup has too much traffic as it is!!

Thanks & 73.

Larry, KE8GW

Date: Fri, 26 Feb 1993 16:53:59 GMT
From: usc!zaphod.mps.ohio-state.edu!pacific.mps.ohio-state.edu!linac!att!mcdchg!
laidbak!jeq@network.UCSD.EDU
Subject: Bikers Ham It up
To: info-hams@ucsd.edu

In article <0mFgZB3w164w@ham.almanac.bc.ca> emd@ham.almanac.bc.ca writes:
>thompson@Apple.COM (Paul Thompson) writes:

>
>> paulb@harley.tti.com (Paul Blumstein) writes:
>> I chalk it up to electric vests. Obviously more and more motorcyclists
>> are concerned about the effects of RF energy radiating from their
>> electric vests, and are taking up an interest in ham radio to learn more
>> about this important subject.
>
>You're slightly mistaken, Paul. We're trying to figure out how to POWER
>our electric vests FROM our radios, so we can keep warm. Course, most of
>us use two metres and there's lots of hot air there. The trouble is,
>receivers for twenty metres are so bulky.....

Why use the radios? Just mount a large loop antenna (say, 4-5 foot diameter) on the back of the bike, connect it to the vest, and keep your speed up enough that the current induced by the earth's magnetic field keeps the vest warm. The only extra you'd need is some sort of mechanism to change antenna orientation, or you'd get cold when riding in a predominantly northerly or southerly direction...

--
Jonathan E. Quist jeq@lachman.com Lachman Technology, Incorporated
DoD #094, KotPP '71 CL450-K4 "Gleep" Naperville, IL
-- There's nothing quite like the pitter-patter of little feet,
\\ followed by the words "Daddy! Yay!"

Date: 26 Feb 93 15:54:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Deviation Measurement and Icom 24AT Adjustment Req'd
To: info-hams@ucsd.edu

Hey folks, the deviation is low on my Icom 24AT.

I've got two data points:

- 1) Complaints of low audio on the local machines.
- 2) Comparative testing with a Marconi modulation analyzer.
(see below for quasi-empirical method of measurement)
By this I mean that my radio measured approximately two thirds the deviation of a friends th78 (which *does* sound better on the local machines).

So..I see on the schematic that there are TWO pots on the output of the microphone op-amp. These dividers (VMOD and UMOD) feed the VHF and UHF PLL/amplifier sections respectively. The question is, where are they located internally? There aren't a whole lot of pots in the rig, but things are awful crowded inside. Or is this a job for the Icom service guys?

warning...technical stuff follows...

Aside, I used FM interstation white noise to measure the deviation. Speaker was located approx 6" from ht. Volume was (subjectively) about the same as normal unswelled simplex. The th78 measured about 1.5Khz, my 24at about 0.9Khz. So this was NOT, I repeat NOT a real deviation test, but it did give me a relative measurement to go on. HOW are real deviation tests (eg end-of-production-line) set up? What is used for the audio source? How many SPLs|dBas|VUs|dynes/cm2 or whatever?

I'm not that familiar with the Marconi box I was using, so I'll have to read up on it (model 2305 if anyone knows it), but I assume there is some automatic way of determining true deviation, ie instrument provides leveled audio output for the test.

Jim N2MPT

Jim Sandoz N2MPT
email att!emclab!jds or jds@emclab.att.com
AT&T Bell Laboratories Holmdel, New Jersey

Date: Fri, 26 Feb 1993 13:25:56 GMT
From: pacbell.com!att-out!cbfsb!cbnewsb.cb.att.com!feg@network.UCSD.EDU
Subject: Elevated Radials
To: info-hams@ucsd.edu

In article <8936@tekig7.PEN.TEK.COM> royle@tekig6.PEN.TEK.COM (Roy W Lewallen) writes:

>
>Good field-strength measurements would be the best real test. MININEC is
>incapable of modeling these effects, but NEC should be able to. Perhaps
>someone who has access to that program (and the patience required to run
>it) would give it a try. I'd be interested in seeing what it has to say.
>

Wiener's papers discuss 4 variants of NEC which he shows experimentally to have application according to the type of antenna being designed. Variation of results between the program variants can be 25% or more. His variant for the raised radial work was not the vanilla version of NEC as it didn't produce accurate results compared to experiment.

Forrest Gehrke feg@dodger.att.com

Date: 26 Feb 1993 05:30:52 GMT
From: topaz.bds.com!topaz.bds.com!ron@uunet.uu.net
Subject: Great Repeater Antennas
To: info-hams@ucsd.edu

If you have some of the older ARRL antenna books (or the real old FM and Repeaters book) you'll find a plan for a UHF antenna that involves cutting various lengths (quarters of wavelengths) of COAX and swapping the braid and the center conductor at the intersections to make a nice antenna.

I'm sure I've got the book at home. I could fax the page that shows the lengths.

-Ron

Date: Thu, 25 Feb 1993 20:27:33 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!
alanb@network.UCSD.EDU
Subject: Ground planes and vertical dipoles
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, alanb@hpnmdla.sr.hp.com (Alan Bloom) writes:

>...a neighbor, on the same pole transformer, had a defective 220V well
>pump. One side of the 220 line was shorted to the pump housing which
>was well-grounded to earth.

^^^^^^^^^^^^^^
^^^^

I can't believe I said that!

>AL N1AL

Date: Thu, 25 Feb 1993 20:25:00 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!
alanb@network.UCSD.EDU
Subject: Ground planes and vertical dipoles
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:

Gary gave an excellent overview of grounding. I just had two points:

>Real earth ground connections serve two primary purposes. The most

>important is as an electrical safety ground for power line and lightning
>currents. These currents are referenced to the Earth by Nature in the
>case of lightning, and by the power company in the case of the electrical
>safety ground.

Very true ... however:

Awhile back I found to my surprise that power company ground and earth ground can be very different when things aren't working right. To make a very long story short, my house had about 60 volts AC on the "safety" ground and neutral wires EVEN WITH THE HOUSE MAIN BREAKER PULLED! After considerable investigative work, it turned out a neighbor, on the same pole transformer, had a defective 220V well pump. One side of the 220 line was shorted to the pump housing which was well-grounded to earth. In effect, the "ground" reference of the pole transformer was about halfway between center tap and one end, instead of at the center tap where it should be. I could get a big, fat spark (about 4A of current) by connecting a wire between my fuse box chassis and a separate 8 ft ground rod.

The moral of the story is: use a 3-wire plug on your ham equipment to safety-ground the chassis. Do not depend on a separate earth ground. The tower/coax should be grounded to earth ground at some point before the coax enters the house (for lightning protection).

>... a vertical sleeve dipole

```
>
>      |
>      | 1/4 wave monopole
>      |
>      |
>      F
>  ---F---
>  | | | |
>  | | | | 1/4 wave sleeve
>  | | | |
>  | | | |
>  | | | |
>  | | | |
>  | | | |
>  | | | |
>  | | | |
>  | | | |
>  | | | |
```

>The sleeve acts as 1/2 of the dipole, and also serves to decouple
>the coax from RF. No Earth ground is required. At VHF you can make
>quick portable antennas like this by simply rolling back a quarterwave
>section of braid from a piece of coax.

I have found this doesn't work well at all. The sleeve decouples

much better if the diameter of the sleeve is much greater than the diameter of the coax. And it works better still if the sleeve is cone-shaped (small at the top, large at the bottom.) This is the approach taken by the Isopole antenna.

AL N1AL

Date: Fri, 26 Feb 1993 13:53:43 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hpuerca.atl.hp.com!edh@network.UCSD.EDU
Subject: HELP! SATELLITE TV DESCRAMBLER
To: info-hams@ucsd.edu

In <1993Feb24.124929.9856@edinboro.edu> w644171c@edinboro.edu writes:

> I would like to know how can I (if possible) descramble satellite
>channels without subscribing to "VIDEOCIPHER II PLUS" (VCII Plus).
> All I'm interested in is the major networks like ABC, NBC, CBS, PBS,
>FOX. Most of these are on Satcom F2 or F1.
> I live too far out to get local affiliate signals clearly off air
>and cable does not come out this far.
> I feel that if you live too far out to receive these signals "FREE"
>via air waves and have a satellite you should get them without having to
>pay for them.
> I am using an American made Drake receiver.
> If anyone can help me out I would truly appreciate it.
> Thanks in advance
> Bill

Bill - not to flame, but all that nice technology up in the sky
cost money and lots of it. The services went to scramble because
people wouldn't support the services with cold cash otherwise.
Fortunately for you, if you look around there are (for now) still
quite a few transponders that are not scrambled. As time goes on
that will change. Better to get the VCII module now and vote with
your money about how those transponders are used.

Satellite providers have grown wise with the years. Pirate chip/
descrambler providers can hardly keep up, and they certainly won't
provide you with updates to their pirate stuff for free! Recent
estimates lead me to believe you can spend more money in a three
year period playing around with illegal equipment updates/fixes,
etc. that you'd spend on the VCII equipment and subscriber fees
for the channels you want (many inexpensive fee packages include
what you want plus more transponders).

Technological infrastructure is expensive. No body can afford to

give it away. IMHO.

Cheers & 73 Ed Humphries N5RCK Hewlett-Packard NARC Atlanta GA

Date: 26 Feb 93 16:32:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: HELP! SATELLITE TV DESCRAMBLER
To: info-hams@ucsd.edu

> I would like to know how can I (if possible) descramble satellite
>channels without subscribing to "VIDEOCIPHER II PLUS" (VCII Plus).
>
> All I'm interested in is the major networks like ABC, NBC, CBS, PBS,
>FOX. Most of these are on Satcom F2 or F1.
> I feel that if you live to far out t receive these signals "FREE"
>via air waves and have a satellite you should get them without having to
>pay for them.

it's cheaper in almost all cases to get a legit subscription to what you want
to watch compared to paying the pirates for new wizard codes everytime the
codes change.

the second reason to subscribe is to show that there is an audience out here.
technology is advancing. new technologies can deliver more program faster
over less sat channels than before. CATV systems can afford this and it
probably won't be available to the home owner (either as cost or
availability). so if you want to keep signals available for you to watch, you
subscribe to the services to make it worth their while to keep a feed open for
the masses.

if everyone was pirating, there would be no reason to have an available to the
public signal or to use common encoding/decoding methods. convert it all to
digital and then multiplex several programs onto 1 channel to save uplink
fees.

bill wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com

Date: Fri, 26 Feb 1993 14:15:29 GMT
From: usc!cs.utexas.edu!uwm.edu!linac!att!cbnews!wrb@network.UCSD.EDU
Subject: mail-order -- good experiences
To: info-hams@ucsd.edu

In article <1993Feb26.003005.25317@Csl.Stanford.EDU> kawai@Csl.Stanford.EDU (goh
kawai - n6uok) writes:

>-----
>(3) Easytech
>
> Easytech sells electronic parts and tools. I like their electronic
> parts section especially. No minimum order, lots in stock (what they
> list in their catalog, they really do have in stock, at least as far
> as I know), and best of all, you can order over the phone -- even
> small parts with confusing part numbers -- and they are very nice
> about it, even if you're only buying one of each.
>
> I've been backordered only once with Easytech (I've ordered many
> times), and that was for a part that the manufacturer never shipped
> (bankruptcy or something), and Easytech eventually notified me they
> can't sell the stuff. That's okay.
>
> I have a feeling they're not doing awfully well financially, with the
> depression and all. I feel sorry for them, and try to order as often
> as I can, but there's a limit to what I can do. It would be a shame
> to have them go out of business. They really are very nice.
>
> If you're tired of driving to a store, poring over small plastic bags
> with resistors, capacitors or semiconductors in them, finding half of
> what you came for but not the other half, going to another store but
> still not finding everything, and after three stores, going home with
> about 70 percent of what you wanted and 100 more miles on your car,
> then give Easytech a call.
>
> EasyTech
> 2917 Bayview Drive
> Fremont, CA 94538
>
> (800)582-4044
>-----
>

I will second the praise for Easytech - but I am wondering if they are still in business! I called a week or so ago and was told the 800 number was disconnected and given the POTS number to call. I called it and got no answer.

>Well, that's it! I'd love to hear your experiences also.

>
>----- Speech Research Program, SRI, Menlo Park, CA 94025-3493 USA
>--- Goh Kawai --- work:(415)859-2231 fax:(415)859-5984 home:(415)323-7214
>----- internet: kawai@speech.sri.com radio: n6uok and 711fqe
>

```
+=====+      Happy user of OS/2 2.0!
| Wally Blackburn      |      Ask me about it!
| wrb@ccsitn.att.com   |
| AT&T NSD              |
| Amateur Radio Station AA8DX    |
| 614-575-6604         |
+=====+
```

Date: 25 Feb 93 13:26:42 GMT
From: news-mail-gateway@ucsd.edu
Subject: NE Repeater Listing
To: info-hams@ucsd.edu

Subject: NE repeater directory
> bruce@think.com; +1 617 234 4810; WT1M
Writes:

>David Borque <borque.sceng.ub.com> has put together an electronic copy of a
>repeater directory for New England. With his permission, I have made this
>available from Think.COM via anonymous FTP in the directory pub/radio/ham.
>Corrections should go to him, but if you also send them to me, I'll try to
>update the FTP-able copy quickly.

Bruce you had everything correct except my email address.

corrections should be sent to bourque@sceng.ub.com

you missed one wonderful letter
corrections are welcomed and encouraged. This list is only as good
as its input. Comments about format are also welcomed.
73 de WB1FLD
bourque@sceng.ub.com

Date: Fri, 26 Feb 1993 12:31:01 GMT
From: usc!howland.reston.ans.net!gatech!concert!unccsun.uncc.edu!
jmcoving@network.UCSD.EDU
Subject: New Kenwood HF Radio TS-50
To: info-hams@ucsd.edu

In article <yHqHZB2w164w@pillock.moron.vware.mn.org>
stevej@pillock.moron.vware.mn.org (Steven Jarosh, KA0VYB) writes:
>flloyd@l1-a.West.Sun.COM (Fred Lloyd [Phoenix SE]) writes:
>> We'll I'm surprised that nobody's mentioned this one yet, the new
>> Kenwood TS-50!

>I too was initially excited by this radio, but once again Kenwood has
>alienated an entire group, VHF,ers.

And why no built-in keyer? After using my Icom 735's built-in keyer I've become spoiled to the point that I wouldn't want an external keyer in the car. There's not enough room in modern cars nowadays for the radio itself, let alone an external keyer. While the size of this thing compensates somewhat, I've always found for mobile use it's best to try to get everything in one cabinet if possible (single 12v cable, no cable needed from keyer to radio, etc.).

Still, it looks kind of neat; perhaps they or Yaesu or Icom will offer a compact radio with a built-in keyer.

--

John Covington WN4BBJ	Internet: jmcoving@mosaic.uncc.edu
P.O. Box 217122	MCI Mail: JCOVINGTON 342-6957
Charlotte, NC 28221-7122	Packet Radio Mail: WN4BBJ @ N7IJI.#CLT1.NC.USA.NA
(704) 537-7653	"Kenneth, what's the frequency?" "I dunno, ask Dan"

Date: 26 Feb 1993 15:23:38 GMT
From: usc!howland.reston.ans.net!gatech!emory!sol.ctr.columbia.edu!
usenet.ucs.indiana.edu!master.cs.rose-hulman.edu!master.cs.rose-hulman.edu!
news@network.UCSD.EDU
Subject: New Kenwood HF Radio TS-50
To: info-hams@ucsd.edu

In article <yHqHZB2w164w@pillock.moron.vware.mn.org>
stevej@pillock.moron.vware.mn.org (Steven Jarosh, KA0VYB) writes:
> flloyd@l1-a.West.Sun.COM (Fred Lloyd [Phoenix SE]) writes:
>
> >
> > We'll I'm surprised that nobody's mentioned this one yet, the new
> > Kenwood TS-50!
> >
> > Well, I didn't buy one :-)) but a friend of mine did and here's the
> > scoop: (Fresh from a three day old sighting)
> >
> > The local HRO received three of the radios last Friday and were sold
> > out within one hour. After seeing and playing with it a bit, it's
easy
> > to see why: it has to be the neatest mobile HF radio on the market
today.
> >
> > Factoids:
> >

> > Kenwood TS-50 Mobile HF Transciever (Retail: \$1099)
> >
> > 160-10M General Coverage
> > 100 memories
> > 100 Watts - AM/FM/SSB/CW
> > Band stacking registers
> > Black-on-Orange LCD Display (like the TM-741 et. al.)
> > Small size - very small size....
> *****stuff deleted*****
> > Conclusion: Yaesu and Icom caught with pants down! Kenwood strikes
hard
> > and fast with an instant hit! Steve sells his 2 month old Icom 735
for
> > \$675! Ten Tec Amp blamed for burn-out of Sony Pixys GPS receiver!
> > Steve, myself and Samuel Adams agree: Hey, this thing is really
cool....
> >
> > -fred
> >
>
> I too was initially excited by this radio, but once again Kenwood has
> alienated an entire group, VHF,ers.
>
> 1. Why not 6m?
> 2. Why no transverter capabilities?
>
> Oh well, let's see if Icom or Yaseu gets a clue on the second go
around!!
>
> Steve KA0VYB

\$\$\$\$\$???????

de k9cun

Date: 26 Feb 1993 15:40:36 GMT
From: usc!howland.reston.ans.net!ux1.cso.uiuc.edu!usenet.ucs.indiana.edu!
master.cs.rose-hulman.edu!master.cs.rose-hulman.edu!news@network.UCSD.EDU
Subject: PL-259 connectors
To: info-hams@ucsd.edu

Beware of cheap Ag/Teflon plugs sold at bargain prices at 'fests.

I bought a dozen a whil back anf the knurled nut does not fit and there
aren't enough threads/

Jack

Date: Fri, 26 Feb 1993 17:24:10 GMT
From: worldbank.org!news@uunet.uu.net
Subject: Snake Island - Which DXCC Country?
To: info-hams@ucsd.edu

Can anyone enlighten me as to which DXCC country Snake Island falls under (4K5ZI).

Tnx. Darrell (NR3Y)

Date: Fri, 26 Feb 1993 17:42:10 GMT
From: sdd.hp.com!col.hp.com!fc.hp.com!jayk@network.UCSD.EDU
Subject: Snake Island - Which DXCC Country?
To: info-hams@ucsd.edu

Darrell Earnshaw (dearnshaw@worldbank.org) wrote:
: Can anyone enlighten me as to which DXCC country Snake Island falls
: under (4K5ZI).
:
: Tnx. Darrell (NR3Y)

I thought is was the same as UB but the CT contest program ARRL.CTY file gives the following:

European Russia: 16: UA: UA,U,R,4K0,4K3,EK,EM,EN,E0,ER,EU,EV,EW,EX
& EY,EZ,4L,US1,UN1,4K5ZI;
 ^^^^^
73, Jay K0GU jayk@fc.hp.com

Date: Thu, 25 Feb 1993 20:02:26 GMT
From: sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!alanb@network.UCSD.EDU
Subject: Soldering PL259's
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:

>In article <14570654@hpnmdla.sr.hp.com> alanb@hpnmdla.sr.hp.com (Alan Bloom)
writes:

>>

>>Here's how to make a reliable solid PL-259 solder job

...
>>Do not remove any braid at this time.
>>
>>TIN THE BRAID. Coat it with a continuous, thin layer of solder.
...
>>Now cut off the end of the tinned insulation, leaving enough to mate
>>inside the connector. ...

>Ok, I part company here. I find it best to go ahead and cut everything
>to length before tinning the braid. ...

I used to do that. The problem is it's very hard not to disturb the flat "lie" of the braid, both when removing the outer insulation and during the soldering process. By leaving all the braid in place and then cutting off the excess AFTER soldering, you are also cutting off the frayed ends that make it hard to screw the coax into the PL-259.

AL N1AL

Date: Fri, 26 Feb 1993 16:37:40 GMT
From: sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!orum@network.UCSD.EDU
Subject: WWV time
To: info-hams@ucsd.edu

Sean.Reigle@f203.n103.z1.fidonet.org (Sean.Reigle@f203.n103.z1.fidonet.org) wrote:
> Anyone have information on the tones of WWV time at 2.5, 5, 10, 15, and 20
> megacycles? I am trying to build an interface for the computer to
> interface the WWV time to sync the computer clock or another clock...

> Sean

If you listen at the hour and half hour they give an address in Ft. Collins you can write to for information. The booklet they send is quite interesting and gives the tone information you are looking for.

End of Info-Hams Digest V93 #260
